

PROJECT NO. 48721

RULEMAKING PROCEEDING TO	§	PUBLIC UTILITY COMMISSION
AMEND 16 TAC §25.505, RELATING	§	
TO RESOURCE ADEQUACY IN THE	§	OF TEXAS
ELECTRIC RELIABILITY COUNCIL	§	
OF TEXAS POWER REGION, AND TO	§	
REPEAL 16 TAC §25.508, RELATING	§	
TO THE HIGH SYSTEM-WIDE OFFER	§	
CAP IN THE ELECTRIC	§	
RELIABILITY COUNCIL OF TEXAS	§	
POWER REGION	§	

**ORDER ADOPTING AMENDMENT TO §25.505 AND REPEAL OF §25.508
AS APPROVED AT THE MAY 9, 2019 OPEN MEETING**

The Public Utility Commission of Texas (commission) adopts an amendment to §25.505, relating to resource adequacy in the Electric Reliability Council of Texas power region, with changes to the proposed text as published in the January 11, 2019 issue of the *Texas Register* (44 TexReg 175). The commission also repeals §25.508, relating to the high system-wide offer cap in the Electric Reliability Council of Texas power region. The amendment to §25.505 improves market certainty and clarity with respect to the Electric Reliability Council of Texas (ERCOT) market. The repeal of §25.508 removes obsolete language from the commission’s rules. This amendment and repeal are adopted under Project Number 48721.

The commission received comments on the proposed amendment and repeal from ERCOT; Gerdau Long Steel North America, Nucor Steel Texas, and CMC Steel Texas (collectively, ERCOT Steel Mills); Invenergy LLC; the Lower Colorado River Authority (LCRA); the Texas Energy Association for Marketers and Direct Energy (collectively, the REP Group); South Texas Electric Cooperative, Inc. (STEC); Texas Competitive Power Advocates (TCPA); Texas Electric Cooperatives, Inc. (TEC); and Texas Industrial Energy Consumers (TIEC). The commission

received reply comments from Invenergy, the REP Group, STEC, TCPA, TIEC, and TEC. No party requested a hearing.

Response to Question About Eliminating the Low System-Wide Offer-Cap (LCAP)

The ERCOT Steel Mills and TIEC supported retaining the LCAP. Both noted that it was imperfect, but argued that it is currently the only “circuit breaker” in the rule, which acts by suspending scarcity pricing under extreme conditions. The ERCOT Steel Mills and TIEC added that all other markets contain a similar feature. TIEC and the REP Group noted that the pricing required to trigger the LCAP is extreme and any triggering of the LCAP would demonstrate that the current scarcity pricing mechanisms are overly aggressive. Similarly, ERCOT Steel Mills stated that, if the “3X” Cost of New Entry (CONE) threshold is reached, then the current LCAP could impede the market from generating an appropriate scarcity pricing signal when true scarcity conditions may still be ongoing, but that generators would have received more than sufficient revenue and consumers would have paid extraordinary energy costs. STEC also supported retaining the LCAP, noting that the LCAP is intended to prevent windfall revenues to generators, and, in a time of tight reserve margins, it is not appropriate to remove this customer protection.

TEC supported retaining the LCAP to protect consumers, including cooperative loads, from sustained high prices. TEC argued that the rationale for LCAP, to protect loads from sustained high prices, remains relevant today.

The REP Group supported retaining the LCAP as a means of price protection against sustained high prices. The REP Group noted that the LCAP still allows pricing up to \$2,000 per MWh.

Invenergy and TCPA recommended that the commission eliminate the LCAP. Invenergy stated that the LCAP predates the implementation of the Operating Reserve Demand Curve (ORDC), which now incents both loads and resources to take actions to maintain system reliability, and therefore the LCAP constraint is no longer necessary. TCPA pointed to the current tight reserve margins, noting that the ERCOT market design should not include mechanisms that are inconsistent with the goal of promoting resource adequacy in the energy-only market. TCPA stated that the LCAP presents a fundamental asymmetry in that low prices can worsen resource adequacy. TCPA further argued that the LCAP potentially handicaps the ability of the market to signal that investment is needed by capping high prices that are driven by resource shortages. TCPA stated that, in the 13 years since the establishment of the LCAP, market experience through a variety of conditions has not demonstrated a need for the LCAP, as the Peaker Net Margin has never been reached. TCPA stated that scarcity should be priced when it is needed, which requires eliminating the LCAP.

TCPA also stated that, if the LCAP were triggered, most end-use customers should be protected from exposure by their REPs' bilateral contracts. TCPA asserted that the sustained pricing that would trigger the LCAP also would quickly draw increased investment into the wholesale market and incent other actions that would naturally limit the duration of the pricing.

In reply comments, the REP Group stated that no commenter concluded that the LCAP would distort prices downward in a time the market is functioning well. The REP Group stated that the LCAP is insurance to keep the market functional in the face of unprecedented market pricing. In

reply to statements that the LCAP is inherently inconsistent with the concept of load shed at the Value of Lost Load (VOLL), the REP Group stated that the LCAP would be effective only when there was a distortion in the marketplace. The REP Group noted that the commission already has other regulatory measures similar to the LCAP, such as the ORDC, which do not allow market forces to control.

STEC recommended that, if the LCAP is eliminated, the annual Peaker Net Margin threshold continue to be calculated for purposes of measuring market performance.

Commission Response

The commission declines to eliminate the LCAP at this time. The commission notes that the LCAP has been in place since 2006, and the interests of the market as a whole are served by continuity and the regulatory certainty provided by the LCAP.

General Comments

STEC supported the proposed changes to §25.505 and §25.508, including the modifications of the natural gas price indices used in the calculation of the Peaker Net Margin, and the removal of obsolete language and policy references. Similarly, Invenergy supported the proposed amendments in §25.505 (a) through (f).

Subsection (a)

LCRA recommended retaining language in the title and in subsection (a) that identifies the nexus between the scarcity pricing mechanism and the goal of ensuring resource adequacy and reliability in ERCOT, and suggested language to this effect in both the title of the rule and in subsection (a).

Commission Response

The commission declines to make this change. The commission believes the title and subsection (a) as proposed accurately reflect the intent of the rule, which is to establish the scarcity pricing mechanism and reporting requirements for the ERCOT power region. The commission makes no changes to the languages as proposed.

Subsection (b)

Invenergy supported the proposed amendments. The REP Group recommended modifying the definition of “load entity” to clarify that the term “load resource” would have the definition used for that term in the ERCOT Protocols. The term “load resource” is not defined in the commission’s rules, and the REP Group argued that referencing the definition in the ERCOT Protocols allows the definition to evolve as technology changes. In reply comments, TCPA stated that the terms “load entity,” “generation entity,” and “resource entity” do not appear in the rule language and therefore should be deleted.

Commission Response

The commission makes changes to the proposed rule to define the term “load resource” by directly incorporating its definition from the ERCOT Protocols into this rule. The

commission believes this change will clarify the meaning of the term “load resource” as referenced in the rule.

In response to TCPA’s comments, the commission notes that the plural of the terms “load entity,” “generation entity,” and “resource entity” are used throughout the rule to specify the reporting requirements for certain market participants to ERCOT. The commission declines to make TCPA’s proposed change, and instead retains these definitions in the adopted rule.

Subsection (c)

Invenergy supported the proposed amendments. ERCOT recommended preserving language that requires ERCOT to address projected system demand in its resource adequacy reports. ERCOT indicated that it believes that any report addressing resource adequacy would require a forecast of both supply and demand, and recommended adding specific language requiring the forecasts to include projected system demand. In reply comments, STEC supported ERCOT’s proposed change to clarify the resource adequacy reports.

Commission Response

The commission agrees with ERCOT’S comments and changes the proposed rule to preserve language that requires ERCOT to address projected system demand in its resource adequacy reports. This change will clarify that ERCOT is to include projected system demand in these reports.

Subsection (f)

LCRA observed that some of the reporting requirements the proposed amendments would delete from subsection (f) are also found in the ERCOT Protocols. LCRA opined that the reporting requirements should be reinstated in order to ensure transparency and fair access to information by all market participants. LCRA stated that changes to the commission's rules are governed by the robust protections of the Texas Administrative Procedure Act, which does not apply to the ERCOT Protocols. In reply comments, STEC agreed with LCRA that ERCOT's reporting requirements should be maintained in the commission's substantive rules.

The ERCOT Steel Mills did not oppose the deletion of language from the current rule that duplicates requirements set out in the ERCOT Protocols, but observed that language regarding the forecasting, reporting, and publication of resource, load, and reserve margin information underpins the current language in the ERCOT Protocols. The ERCOT Steel Mills declared that it is in the public interest to ensure that information regarding resource adequacy, collateral generation capacity, and load data information is robustly reported and freely disseminated to market participants. The ERCOT Steel Mills asserted that, while the proposed deletions will afford ERCOT and market participants more flexibility, some tethering to the commission rules would be beneficial. The ERCOT Steel Mills requested that, if the commission repeals subsection (f), that it state in the preamble to the order repealing subsection (f) that this type of information is necessary and valuable. The ERCOT Steel Mills further requested that the commission explain that the intent of the repeal is simply to afford more flexibility for improving and enhancing the current forecasting, reporting, and publication requirements found within the current ERCOT Protocols. The ERCOT Steel Mills also asked that the commission carefully review modifications in this area to ensure that future changes improve and do not diminish the requirements.

TEC agreed with retaining reporting requirements for the sake of transparency, even if the result is a rule that duplicates the ERCOT Protocols.

In reply comments, the REP Group supported changes to ensure that the commission's rule clarifies the market information reporting obligations for ERCOT.

Commission Response

The commission agrees with the parties that there is value in retaining the reporting requirements to provide certainty about the type of information that ERCOT will publish to the market. The commission therefore retains subsection (f) to set expectations for the market and ensure transparency. The commission removes obsolete language, updates other language to reflect contemporary terminology, and modifies subsection (f) to improve clarity.

Subsection (g) (Proposed Subsection (f))

If the commission were to eliminate the LCAP, TCPA recommended that the subsection be retitled "scarcity pricing parameters."

Commission Response

Because the LCAP is not being eliminated in the adopted rule, TCPA's recommendation is not applicable.

Subsection (g)(2) (Proposed Subsection (f)(2))

Several parties commented on the heat rate multiplier in subsection (g)(2), which factors into the Peaker Net Margin calculation. The ERCOT Steel Mills and TIEC recommended modifying the heat rate multiplier in the Peaking Operating Cost from ten to eight MMBtu per MWh to reflect new peaking technologies. The ERCOT Steel Mills noted that the current multiplier of ten represented the prevailing typical heat rate of a gas-fired simple cycle peaking unit at the time the rule was originally adopted, and argued that the rule should be updated to reflect currently available technology. In reply comments, the REP Group agreed with TIEC and the ERCOT Steel Mills that the ten times multiplier is not reflective of the current market, and that an eight times multiplier should be used instead.

In reply comments, STEC responded that the peaking units referenced by the ERCOT Steel Mills and TIEC have heat rates that are closer to nine MMBtu per MWh, and that there are no peaking units of this type currently operating within ERCOT or planned to be developed. STEC noted the ERCOT interconnection queue only shows planned peaking units with heat rates at or above ten MMBtu per MWh. STEC argued that lowering the heat rate multiplier, which would lower the threshold for the Peaker Net Margin, would have no justification and would further jeopardize the continued availability of existing resources by negating revenue streams at a time when resource adequacy remains a high priority.

TIEC supported the commission's revision to update the Peaking Operating Cost to use the natural gas price index value determined by ERCOT rather than the Houston Ship Channel. TIEC opined

that this would better reflect actual costs and increase the calculation of Peaker Net Margin revenues.

Commission Response

The commission makes no changes to subsection (g)(2) as proposed. The commission agrees with STEC that the current heat rate multiplier reflects the existing natural gas fleet in ERCOT, which is appropriate when calculating a proxy for generator revenues.

Subsection (g)(3) (Proposed Subsection (f)(3))

The ERCOT Steel Mills suggested adding language to ensure that the real-time energy price definition includes ORDC revenues. The ERCOT Steel Mills stated that the real-time price of energy is a component of the Peaker Net Margin, and the ORDC mechanism was not in place when the Peaker Net Margin was originally adopted. The ERCOT Steel Mills noted that the ORDC contributes significantly to peaker revenue, and should be considered in the Peaker Net Margin calculation.

Commission Response

The commission notes that the ORDC adder is already included in real-time energy prices to calculate the Peaker Net Margin. The commission determines that no further clarification is warranted at this time.

Subsection (g)(4) (Proposed Subsection (f)(4))

The REP Group noted that there is a concern as to whether the Peaker Net Margin calculation should also include day-ahead market prices and ancillary services. The REP Group argued that consumers were exposed to higher prices in 2018 because of high day-ahead prices, even when the real-time prices remained low. Additionally, the REP Group observed that the CONE calculation is based on combined-cycle base load units that may not be the next technology that will be built.

In reply comments, TIEC asserted that forward bilateral contracts are likely the greatest contributor to generator profits. As a result, TIEC argued that the Peaker Net Margin is not a useful metric for determining whether the market is providing sufficient financial incentive for new entry. If the commission retains the Peaker Net Margin, TIEC agreed with the REP Group that day-ahead and ancillary services revenues should be included in the calculation to provide better insight into generator earnings.

In reply comments, STEC disagreed with the REP Group's recommendation to include day-ahead market prices and ancillary service revenues in the Peaker Net Margin calculation. STEC stated that this would make the Peaker Net Margin threshold more likely to be reached in times of high prices that would signal a functioning market with little to no reserves. STEC argued that the Peaker Net Margin and the LCAP are designed to be stop-gap mechanisms, rather than price ceilings. STEC recommended that the commission maintain the current calculation methodology for the Peaker Net Margin.

Commission Response

The commission declines to include day-ahead market prices or ancillary services revenues in the Peaker Net Margin calculation. These metrics do not reflect the goal of the Peaker Net Margin, which is to calculate revenues that a peaking unit would receive. The Peaker Net Margin threshold is intended to be a high barrier to ensure that generators have sufficiently recovered revenues before the LCAP is imposed.

Subsection (g)(6)(A) (Proposed Subsection (f)(6)(A))

TCPA stated that, should the commission retain the LCAP, the LCAP should be set at a value that would continue to send a scarcity pricing signal. TCPA suggested a value of \$4,500 per MWh. This level would represent a 50% reduction from the High System-Wide Offer Cap as opposed to an 80% reduction with the current value. In reply comments, Invenergy agreed that increasing the LCAP to \$4,500 per MWh would better balance the need to send a sufficient scarcity signal to promote investment while protecting unhedged load from sustained high prices. TCPA also suggested codifying the current VOLL in the rule. STEC recommended that the commission consider increasing the value of the LCAP based on current and projected market conditions, and that the commission re-evaluate the LCAP value at the same time it reevaluates the VOLL or the system-wide offer cap in Project No. 48540, *Review of Real-Time Co-optimization in the ERCOT Market*.

Commission Response

The commission declines to increase the LCAP at this time. The commission adopted the current LCAP value at the same time as the current High System-Wide Offer Cap of \$9,000

per MWh, and has historically raised the LCAP only in tandem with the increases to the High System-Wide Offer Cap. The commission is not revising the High System-Wide Offer Cap in this project, and the commission is not persuaded that a change to the LCAP is necessary at this time. The commission will consider the VOLL in Project No. 48540. The commission makes no changes to this portion of the rule as proposed.

Subsection (g)(6)(C)

Instead of the “3X” CONE threshold that forms the Peaker Net Margin, the ERCOT Steel Mills supported an ORDC “circuit breaker,” which would be designed in the form of an annual fixed dollar cap on cumulative payments. The ERCOT Steel Mills stated that “3X” CONE is excessively high, given that “1X” CONE can generate sufficient generator revenues. The ERCOT Steel Mills argued that a CONE-based trigger is inappropriate as it focuses solely on generator revenues, does not consider negative consumer price impacts attributable to the ORDC, and is not transparent.

The ERCOT Steel Mills proposed that a fixed-dollar cap on cumulative payments be used instead to account for both incentivizing new market entry and the economic impact of the ORDC on consumers. The ERCOT Steel Mills opined that the implementation of the recent ORDC directives in Project No. 48551, *Review of Summer 2018 ERCOT Market Performance*, could result in higher prices that would have a negative impact on consumers in the ERCOT market and the Texas economy. The ERCOT Steel Mills stated that the impact of the ORDC changes made in that project should be monitored to avoid an excessively negative or distorting impact on competitive market pricing. The ERCOT Steel Mills proposed language to state that, if the ORDC and the reliability

deployment price adder generate a certain amount of generator revenue in a calendar year, ERCOT will cease to apply those adders for the remainder of the year.

In reply comments, TIEC argued that “3X” CONE would be an extraordinary wealth transfer from consumers to generators, and “2X” CONE would be a more reasonable threshold. TIEC stated in reply comments that the LCAP has never been triggered, but given the recent changes to increase ORDC revenues, it would be appropriate to implement a more conservative threshold to prevent unintended consequences.

TIEC stated that the CONE is far above the actual cost of new build, is an overly conservative estimate of earnings necessary to incentivize new entry, and is unrealistic in its limitation on real-time market revenues. TIEC noted that generation has continued to be developed in ERCOT despite the Peaker Net Margin calculation never even reaching the half-way point to the “3X” CONE threshold. TIEC agreed with the ERCOT Steel Mills that “3X” CONE is excessive and would allow for dramatic wealth transfers before consumers are protected from excessively high prices. TIEC shared concerns that the LCAP may not properly incentivize market performance, but argued that, at the Peaker Net Margin of “3X” CONE, the market would have limited ability to respond to high prices. TIEC believed it would be prudent to lower the LCAP threshold to “2X” CONE.

In reply comments, the REP Group supported lowering the system-wide offer cap if the Peaker Net Margin exceeds “3X” CONE.

Commission Response

The commission notes that the Peaker Net Margin threshold calculation includes the revenues generated by the ORDC. The commission determines that maintaining the “3X” CONE threshold ensures that generators are able to sufficiently recover costs and have proper incentives to continue to provide generation in the market, ensuring a continued availability of generation that is low-cost in the many intervals of the year in which resources are not scarce. This approach also ensures that demand response programs and facilities continue to develop in anticipation of those dynamics.

Subsection (g)(6)(D) and (g)(6)(E) (Proposed Subsection (f)(6)(D) and Subsection (f)(6)(E))

ERCOT stated that, if the LCAP is modified to operate not simply as a cap on offers, but as a cap on energy prices as proposed, then ERCOT would incur some expense to modify the Security-Constrained Economic Dispatch (SCED) engine. ERCOT explained that prices in the ERCOT market are a function not only of the marginal price of energy needed to meet system demand, but also of the price of congestion.

ERCOT noted that it was unclear whether the proposed amendments’ reference to a prohibition on an administrative pricing mechanism would apply to the power-balance penalty curve, maximum shadow prices for transmission constraint violations, or the use of proxy energy offer curves for generators that have not submitted complete offers. ERCOT stated that, if these items were to be included as administrative pricing mechanisms, then deactivating these features would likely be costly as it would require changes to the SCED optimization engine. ERCOT offered alternative language if it is the commission’s intention to eliminate the operation of price adders, such as the

ORDC and the reliability deployment price adder after the LCAP is imposed. Similarly, TCPA asserted that the commission should strike the proposed language that states that “energy prices will not exceed the LCAP,” noting that the shadow price cap and shift factors in congestion management can cause prices to exceed the system-wide offer cap. TCPA suggested that, if the commission retains the LCAP, the rule should limit offers so that these elements can be included without exceeding the LCAP. In reply comments, STEC agreed with TCPA’s suggestions to avoid rule amendments that would implicate many market features and necessitate changes to SCED, especially given that Peaker Net Margin has never been reached. In reply comments, TEC agreed with ERCOT’s edits to accommodate pricing outcomes related to the Power Balance Penalty Curve, and recommended that the commission not specify market design elements, such as the ORDC or the reliability deployment price adder in the rule at this time.

TCPA and Invenergy stated that the reliability deployment price adder should continue if the LCAP is triggered. TCPA and Invenergy asserted that the reliability deployment price adder is not a scarcity pricing mechanism, but rather a correction of the price suppression associated with out-of-market reliability deployments, which may or may not occur during scarcity conditions.

STEC, TCPA, and TEC suggested retaining both the LCAP and the ORDC and setting the VOLL equal to the LCAP when the Peaker Net Margin threshold is triggered. TEC asserted this would allow prices to continue to be set by the ORDC during scarcity, while protecting consumers from potentially extreme costs. TEC stated that this would allow day-ahead offers to be limited to the LCAP while permitting real-time prices to rise to the VOLL as defined by the ORDC. TEC noted that the commission does not need to prescribe rule language specifying the VOLL, but could

describe the VOLL amount in the preamble of the Proposal for Adoption. TEC explained that the LCAP, which predates the ORDC, reflects the old paradigm in which high offers generally drove revenue expectations over time. TEC opined that, with the implementation of the ORDC mechanism, revenue outcomes during scarcity became decoupled from high generator offers. TEC asserted that removing the ORDC when the LCAP is in effect would revert back to a legacy approach. Additionally, TEC suggested removing specific references to the ORDC or any other administrative pricing mechanism to allow greater flexibility to the commission and ERCOT as market dynamics change over time. In reply comments, TEC agreed with TCPA and Invenergy that the ORDC provides critical pricing signals that are needed to appropriately value the reliability contribution of operating reserves. TEC concluded that retaining the LCAP and the ORDC with a reduced VOLL would shield load from excessive costs.

Invenergy stated that, with low reserve margins, the price adders are necessary to preserve system reliability. Invenergy opined that suspending the adders when the LCAP is imposed would send an inconsistent long-term pricing signal to the market by reducing revenues necessary to attract investment. Similarly, TCPA stated that the ORDC should be retained to provide scarcity pricing signals. In reply comments, STEC opined that suspending the ORDC when the LCAP is in effect could send an incorrect signal to decommit resources, rather than encouraging sustained commitment of those resources. STEC noted that it is possible that the Peaker Net Margin could be reached, given the changing generation portfolio in ERCOT and current reserve margins, and that imposing the LCAP and eliminating ORDC could overcorrect for instances of high prices and eliminate the sustained price signals for new generation. In reply comments, Invenergy agreed

with STEC's comments, stating that price adder signals are increasingly necessary to relieve real-time resource capacity shortages and preserve system reliability.

The REP Group agreed that the ORDC could be continued if the LCAP were in place, if the VOLL were equal to the LCAP when the LCAP is effective. The REP Group remarked that such a mechanism may increase the Revenue Neutrality Allocation uplift to load, and recommended that the Independent Market Monitor, the commission, and stakeholders consider the effects of such action on Revenue Neutrality Allocation or other potential market impacts.

TIEC supported suspension of the ORDC, the reliability deployment price adder, and perhaps other administrative pricing adders, such as the proxy energy curves and the Power Balance Penalty Curve when the LCAP is triggered. TIEC pointed out that while these features are important, the interests of customers supports suspending administrative scarcity pricing mechanisms. If the commission were to adopt amendments that instead applied the ORDC in the event that the LCAP was imposed, then TIEC recommended setting VOLL equal to the LCAP to resolve the concern of divergence between the day-ahead and real-time markets.

TIEC observed that the commission has established a number of administrative changes to target a reserve margin higher than economically optimal that should be removed once LCAP has been applied. TIEC recommended that the commission modify the Minimum Contingency Level of the ORDC to reflect the level of reserves where actual firm load shed occurs, which is about 1,000 to 1,200 MW. TIEC also recommended that the commission eliminate any artificial standard

deviation shifts and apply an ORDC curve that is based on actual and mean volatility of reserves across peak hours in the summer.

Commission Response

The commission agrees with the commenters that argued that retaining the ORDC and reliability deployment price adders continue to have value after the Peaker Net Margin threshold is reached. As a result, the VOLL should be set equal to the system-wide offer cap that is then in effect. The commission modifies the rule accordingly. This approach ensures market consistency by continuing to apply the ORDC and reliability deployment price adders even after the LCAP is imposed and is intended to reduce the time and cost to implement the changes that may result from this proceeding. Specifically, the rule is amended to state that the VOLL will equal the currently effective system-wide offer cap and that, when the LCAP is imposed, energy prices, exclusive of congestion prices, will not exceed the LCAP plus \$1 for the remainder of the calendar year. This change will ensure that all of the mechanisms in place in the current ERCOT market are preserved, and help protect loads while keeping the overall fundamentals of the energy-only market in place. The commission also notes that it does not intend for elements such as the shadow price caps or the Power Balance Penalty Curve to be suspended with the imposition of the LCAP.

The commission also deletes the references to the Independent Market Monitor in subsection (g)(6)(E). The commission's rules encompass a review of the scarcity pricing mechanism in its requirement that the Independent Market Monitor evaluate the operations of the wholesale market in §25.365(c)(2).

Subsection (h) (Proposed Subsection (g))

LCRA recommended adding language to instruct ERCOT to use the stakeholder process to develop rules that “implement and” comply with the section.

Commission Response

The commission adopts LCRA’s proposed change with modifications. The change will provide more clarity to the rule.

Proposed Repeal of §25.508

Invenergy supported the proposed repeal of §25.508, and LCRA stated it had no objection to the proposed repeal of §25.508. No party filed comments opposing the repeal of §25.508.

Commission Response

The commission repeals §25.508 as proposed.

All comments, including any not specifically referenced herein, were fully considered by the commission. In adopting this section, the commission makes other minor modifications for the purpose of clarifying its intent.

The amendment and repeal are adopted under §14.002 of the Public Utility Regulatory Act, Tex. Util. Code Ann. (PURA), which provides the commission with the authority to make and enforce rules reasonably required in the exercise of its powers and jurisdiction and specifically, PURA §39.101, which establishes that customers are entitled to safe, reliable, and reasonably priced

electricity, and gives the commission the authority to adopt and enforce rules to carry out these provisions; and §39.151, which grants the commission oversight and review authority over independent organizations such as ERCOT, directs the commission to adopt and enforce rules relating to the reliability of the regional electrical network and accounting for the production and delivery of electricity among generators and all other market participants, and authorizes the commission to delegate to an independent organization such as ERCOT responsibilities for establishing or enforcing such rules.

Cross reference to statutes: PURA §§14.002, 39.101, and 39.151.

§25.505. Reporting Requirements and the Scarcity Pricing Mechanism in the Electric Reliability Council of Texas Power Region.

- (a) **General.** The purpose of this section is to prescribe reporting requirements for the Electric Reliability Council of Texas (ERCOT) and market participants, and to establish a scarcity pricing mechanism for the ERCOT market.
- (b) **Definitions.** The following terms, when used in this section, have the following meanings, unless the context indicates otherwise:
- (1) **Generation entity** -- an entity that owns or controls a generation resource.
 - (2) **Load entity** -- an entity that owns or controls a load resource. A load resource is a load capable of providing ancillary service to the ERCOT system or energy in the form of demand response and is registered with ERCOT as a load resource.
 - (3) **Resource entity** -- an entity that is a generation entity or a load entity.
- (c) **Resource adequacy reports.** ERCOT must publish a resource adequacy report by December 31 of each year that projects, for at least the next five years, the capability of existing and planned electric generation resources and load resources to reliably meet the projected system demand in the ERCOT power region. ERCOT may publish other resource adequacy reports or forecasts as it deems appropriate. ERCOT must prescribe requirements for generation entities and transmission service providers (TSPs) to report their plans for adding new facilities, upgrading existing facilities, and mothballing or retiring existing facilities. ERCOT also must prescribe requirements for load entities to report their plans for adding new load resources or retiring existing load resources.

- (d) **Daily assessment of system adequacy.** Each day, ERCOT must publish a report that includes the following information for each hour for the seven days beginning with the day the report is published:
- (1) System-wide load forecast; and
 - (2) Aggregated information on the availability of resources, by ERCOT load zone, including load resources.
- (e) **Filing of resource and transmission information with ERCOT.** ERCOT must prescribe reporting requirements for resource entities and TSPs for the preparation of the assessment required by subsection (d) of this section. At a minimum, the following information must be reported to ERCOT:
- (1) TSPs will provide ERCOT with information on planned and existing transmission outages.
 - (2) Generation entities will provide ERCOT with information on planned and existing generation outages.
 - (3) Load entities will provide ERCOT with information on planned and existing availability of load resources, specified by type of ancillary service.
 - (4) Generation entities will provide ERCOT with a complete list of generation resource availability and performance capabilities, including, but not limited to:
 - (A) the net dependable capability of generation resources;
 - (B) projected output of non-dispatchable resources such as wind turbines, run-of-the-river hydro, and solar power; and

- (C) output limitations on generation resources that result from fuel or environmental restrictions.
- (5) Load serving entities (LSEs) will provide ERCOT with complete information on load response capabilities that are self-arranged or pursuant to bilateral agreements between LSEs and their customers.
- (f) **Publication of resource and load information in ERCOT markets.** To increase the transparency of the ERCOT-administered markets, ERCOT must post the information required in this subsection at a publicly accessible location on its website. In no event will ERCOT disclose competitively sensitive consumption data. The information released must be made available to all market participants.
 - (1) ERCOT will post the following information in aggregated form, for each settlement interval and for each area where available, two calendar days after the day for which the information is accumulated:
 - (A) Quantities and prices of offers for energy and each type of ancillary capacity service, in the form of supply curves;
 - (B) Self-arranged energy and ancillary capacity services, for each type of service;
 - (C) Actual resource output;
 - (D) Load and resource output for all entities that dynamically schedule their resources;
 - (E) Actual load; and
 - (F) Energy bid curves, cleared energy bids, and cleared load.

- (2) ERCOT will post the following information in entity-specific form, for each settlement interval, 60 calendar days after the day for which the information is accumulated, except where inapplicable or otherwise prescribed. Resource-specific offer information must be linked to the name of the resource (or identified as a virtual offer), the name of the entity submitting the information, and the name of the entity controlling the resource. If there are multiple offers for the resource, ERCOT must post the specified information for each offer for the resource, including the name of the entity submitting the offer and the name of the entity controlling the resource. ERCOT will use §25.502(d) of this title (relating to Pricing Safeguards in Markets Operated by the Electric Reliability Council of Texas) to determine the control of a resource and must include this information in its market operations data system.
- (A) Offer curves (prices and quantities) for each type of ancillary service and for energy in the real time market, except that, for the highest-priced offer selected or dispatched for each interval on an ERCOT-wide basis, ERCOT will post the offer price and the name of the entity submitting the offer three calendar days after the day for which the information is accumulated.
- (B) If the clearing prices for energy or any ancillary service exceeds a calculated value that is equal to 50 times a natural gas price index selected by ERCOT for each operating day, expressed in dollars per megawatt-hour (MWh) or dollars per megawatt per hour, during any interval, the portion of every market participant's price-quantity offer pairs for balancing energy service

and each other ancillary service that is at or above a calculated value that is equal to 50 times a natural gas price index selected by ERCOT for each operating day, expressed in dollars per megawatt-hour (MWh) or dollars per megawatt per hour, for that service and that interval must be posted seven calendar days after the day for which the offer is submitted.

- (C) Other resource-specific information, as well as self-arranged energy and ancillary capacity services, and actual resource output, for each type of service and for each resource at each settlement point;
- (D) The load and generation resource output, for each entity that dynamically schedules its resources; and
- (E) For each hour, transmission flows, voltages, transformer flows, voltages and tap positions (i.e., State Estimator data). Notwithstanding the provisions of this subparagraph and the provisions of subparagraphs (A) through (D) of this paragraph, ERCOT must release relevant State Estimator data earlier than 60 days after the day for which the information is accumulated if, in its sole discretion, it determines the release is necessary to provide a complete and timely explanation and analysis of unexpected market operations and results or system events, including but not limited to pricing anomalies, recurring transmission congestion, and system disturbances. ERCOT's release of data in this event must be limited to intervals associated with the unexpected market or system event as determined by ERCOT. The data released must be made available simultaneously to all market participants.

- (g) **Scarcity pricing mechanism (SPM).** ERCOT will administer the SPM. The SPM will operate as follows:
- (1) The SPM will operate on a calendar year basis.
 - (2) For each day, the peaking operating cost (POC) will be 10 times the natural gas price index value determined by ERCOT. The POC is calculated in dollars per megawatt-hour (MWh).
 - (3) For the purpose of this section, the real-time energy price (RTEP) will be measured as an average system-wide price as determined by ERCOT.
 - (4) Beginning January 1 of each calendar year, the peaker net margin will be calculated as: $\sum((RTEP - POC) * (\text{number of minutes in a settlement interval} / 60 \text{ minutes per hour}))$ for each settlement interval when $RTEP - POC > 0$.
 - (5) Each day, ERCOT will post at a publicly accessible location on its website the updated value of the peaker net margin, in dollars per megawatt (MW).
 - (6) **System-Wide Offer Caps.**
 - (A) The low system-wide offer cap (LCAP) will be set on a daily basis at the greater of:
 - (i) \$2,000 per MWh and \$2,000 per MW per hour; or
 - (ii) 50 times the natural gas price index value determined by ERCOT, expressed in dollars per MWh and dollars per MW per hour.
 - (B) The high system-wide offer cap (HCAP) will be \$9,000 per MWh and \$9,000 per MW per hour.
 - (C) The system-wide offer cap will be set equal to the HCAP at the beginning of each calendar year and maintained at this level until the peaker net margin

during a calendar year exceeds a threshold of three times the cost of new entry of new generation plants.

- (D) If the peaker net margin exceeds the threshold established in subparagraph (C) of this paragraph during a calendar year, the system-wide offer cap will be set to the LCAP for the remainder of that calendar year. In this event, ERCOT will continue to apply the operating reserve demand curve and the reliability deployment price adder for the remainder of that calendar year. Energy prices, exclusive of congestion prices, will not exceed the LCAP plus \$1 for the remainder of that calendar year.
- (E) The value of the lost load will be equal to the value of the system-wide offer cap in effect.

- (h) **Development and implementation.** ERCOT must use a stakeholder process to develop and implement rules that comply with this section. Nothing in this section prevents the commission from taking actions necessary to protect the public interest, including actions that are otherwise inconsistent with the other provisions in this section.

§25.508. High System-Wide Offer Cap in the Electric Reliability Council of Texas Power Region. (REPEAL)

This agency certifies that the adoption has been reviewed by legal counsel and found to be a valid exercise of the agency’s legal authority. It is therefore ordered by the Public Utility Commission of Texas that §25.505, relating to reporting requirements and offer caps in the Electric Reliability Council of Texas power region, is hereby adopted with changes to the text as proposed, and §25.508, relating to high system-wide offer cap in the Electric Reliability Council of Texas region power region, is hereby repealed.

Signed at Austin, Texas the _____ day of May 2019.

PUBLIC UTILITY COMMISSION OF TEXAS

DEANN T. WALKER, CHAIRMAN

ARTHUR C. D’ANDREA, COMMISSIONER

SHELLY BOTKIN, COMMISSIONER